

Remarks

Claims 1-15 are pending in the application. Claim 15 has been withdrawn from consideration. Claims 1 and 10 have been amended. The drawings have been amended. Reconsideration and re-examination of the application is respectfully requested for the reasons set forth herein.

1. In response to the election/restriction requirement, the election of the species of claims 1-14 drawn to group 1, classified in class 313, subclass 407 made by Carlos Herrera on December 17, 2002 is affirmed. In view of this election, claim 15 is withdrawn from consideration.

2. The Examiner has objected to Figure 3 of the drawings, because Figure 3 should be designated with the legend "prior art." A proposed drawing correction of Figure 3 has been submitted adding the legend "prior art." In view of the proposed drawing correction, removal of the objection to the drawings is respectfully requested.

A proposed drawing correction of Figure 4 and 5 has also been submitted. A proposed drawing correction of Figure 4 has been submitted adding the legend "prior art." A proposed drawing correction of Figure 5 has been submitted changing reference numeral 20 to reference numeral 70 to correspond with the written description. Approval by the Examiner of the proposed drawing corrections is respectfully requested.

3. The Examiner has rejected claims 1, 2, 4-8, and 10-14 under 35 U.S.C. 102(b) as being anticipated by Hashiba et al. (US Patent No. 4,780,641).

With regard to claim 1, the Examiner stated that Hashiba et al. discloses an apparatus for retaining a damper wire on a grill type mask assembly in a cathode ray tube. The grill type mask assembly has a frame 13 and a mask 3. A damper spring 21 comprises a first metallic layer and a second metallic layer (column 3, lines 20+). The damper spring has a first end and an opposing second end. The second end is coupled to the frame 13. A tab 22 is formed on the damper spring 21 and adapted to accept the damper wire that traverses the mask. The Examiner therefore concluded that Hashiba et al. teaches all the elements of claim 1.

Claim 1 has been amended to contain the claim limitations of claim 2 that said first metallic layer is disposed on a second metallic layer wherein the first metallic layer is a different material than the second metallic layer. Claim 2 has been cancelled. Hashiba et al. teaches a cathode ray tube with an aperture grill 1. A number of grid elements 3 are stretched between a pair of arms 2 of a frame 13. Spring elements 21 are fixed to a pair of support members 5 of the frame 13. The pair of spring elements 21 have a thin band 7 of stainless steel welded to a surface thereof to fix the damper wire 4 to the spring element 21. Each spring element 21 has a recess 22 formed on a free end for temporarily securing the damper wire 4 stretched between the springs 21 during the formation of a fluorescent surface to eliminate the formation of a damper shadow on the fluorescent surface. The damper wire 4 is released from the recess 22 and restored to a prescribed position after formation of the fluorescent surface. Unlike the claimed invention that teaches a first metallic layer disposed on a second metallic layer wherein the first metallic layer is a different material than the second metallic layer. Hashiba et al. teaches the repositioning of a damper wire on a damper spring during the formation of a fluorescent surface to prevent damper shadow. The damper

wire is said to be fixed to the damper spring 21 by seam welding through a "thin band 7 of stainless steel." (Column 3, lines 17-24). There is no reference in Hashiba et al. to the material forming the damper spring, therefore, Hashiba et al. does not teach all of the elements of amended claim 1. Removal of the rejection of claim 1 under 35 U.S.C. 102(b) is respectfully requested.

Claims 2 and 4-8 depend from independent claim 1. Claim 2 has been cancelled. Also, as previously discussed, Hashiba et al. does not teach all the elements of claim 1. Because Hashiba et al. does not teach all the elements of claim 1, Hashiba et al. does not teach all the elements of claims 4-8. More specifically, Hashiba et al. does not teach all the elements of claims 5 and 6 wherein the first metallic layer is disposed on either the inside (as in claim 5) or the outside (as in claim 6) to exert tension on the damper wire. Removal of the rejection of claims 4 and 6-8 under 35 U.S.C. 102(b) is respectfully requested.

With regard to claim 10, the Examiner stated that Hashiba et al. discloses an apparatus for retaining a damper wire proximate a grill type mask assembly in a cathode ray tube. The grill type mask assembly has a frame 13 and a mask 3. A damper spring 21 comprises a first end having a curvature and an opposing second end. The second end is coupled to the frame 13. The first end has a curvature aligned with an edge of the mask 3 for adjustably defining an elevation level of the damper wire with respect to the mask 3. The Examiner therefore concluded that Hashiba et al. teaches all the elements of claim 10.

Claim 10 has been amended to state that the first end has a curvature with an apex aligned with an edge of the mask for adjustably defining an elevation level of the damper wire with respect to the mask. Hashiba et al. teaches a cathode ray tube with an aperture grill 1. A number of grid elements 3 are stretched between a pair of arms 2 of a frame 13. Spring

elements 21 are fixed to a pair of support members 5 of the frame 13. The spring elements 21 are formed with a substantially curved shape. The curve has an apex extending away from the frame 13 that receives a thin band 7 to fix a damper wire 4 to the spring element 21.

Unlike the claimed invention that teaches a damper spring having a first end with a curvature with an apex aligned with an edge of the mask for adjustably defining an elevation level of the damper wire with respect to the mask, Hashiba et al. teaches a spring element with a curve extending from a first end to a second end with an apex therebetween. Hashiba et al., therefore, does not teach all of the elements of amended claim 10. Removal of the rejection of claim 10 under 35 U.S.C. 102(b) is respectfully requested.

With regard to claim 11, the Examiner stated that Hashiba et al. discloses a grill type mask assembly in a cathode ray tube. The cathode ray tube comprises a frame 13, a mask 3 with strands disposed within the frame 13, and a damper spring 21 coupled to the mask 3. The damper spring 21 includes a portion formed by a first layer 21 having a first coefficient of thermal expansion coupled to a portion formed by a second layer 7 having a different coefficient of thermal expansion for varying tension in the damper spring to compensate for changes induced by corresponding changes in temperature within the cathode ray tube. The Examiner therefore concluded that Hashiba et al. teaches all the elements of claim 11.

Hashiba et al. does not teach all the elements of claim 11. Claim 11 states that a damper spring is coupled to said mask including a portion formed by a first layer having a first coefficient of thermal expansion coupled to a portion formed by a second layer and having a different coefficient of thermal expansion for varying a tension in said damper spring to compensate for changes induced by corresponding changes in temperature within said cathode ray tube. Hashiba et al. teaches a cathode ray tube with an aperture grill 1, and a

number of grid elements 3 stretched between a pair of arms 2 of a frame 13. Spring elements 21 are fixed to a pair of support members 5 of the frame 13. The pair of spring elements 21 have a thin band 7 of stainless steel welded to a surface thereof to fix the damper wire 4 to the spring element 21. Hashiba et al. does not teach the spring elements 21 being made from a different material than the thin band 7, or the spring elements having a different coefficient of thermal expansion than the thin band 7 to compensate for temperature changes within the cathode ray tube. Hashiba et al., therefore, does not teach all of the elements of claim 11. Removal of the rejection of claim 11 under 35 U.S.C. 102(b) is respectfully requested.

Claims 12-14 depend from independent claim 11. As previously discussed, Hashiba et al. does not teach all the elements of claim 11. Because Hashiba et al. does not teach all the elements of claim 11, Hashiba et al. does not teach all the elements of claims 12-14. Removal of the rejection of claims 12-14 under 35 U.S.C. 102(b) is respectfully requested.

4. The Examiner has rejected claim 3 under 35 U.S.C. 103(a) as being unpatentable over Hashiba et al. (US Patent No. 4,780,641) in view of Ito et al. (US Patent No. 5,672,935). The Examiner stated that Hashiba et al. teaches all the elements of claim 3 as previously discussed, except the first metallic layer being comprised of carbon steel. Ito et al. discloses a first metallic layer being comprised of carbon steel. Ito et al. further teaches the use of both a high and low expansion coefficient metal for a spring in order to compensate for the variable temperatures within the cathode ray tube. The Examiner therefore concluded that it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the first metallic layer of Hashiba et al. from carbon steel because by using a high expansion coefficient metal the spring is able to sustain its shape during variable

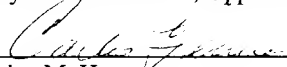
temperatures such that the tension on the damper wire will remain constant to improve the quality of the mask.

The combination of Hashiba et al. and Ito et al. does not teach or suggest all of the elements of claim 3. Claim 3 depends from independent claim 1. As previously discussed, Hashiba et al. does not teach all of the claim limitations of amended claim 1. Because Hashiba et al. does not teach all of the claim limitations of amended claim 1, Hashiba et al. does not teach all of the claim limitations of claim 3, except the first metallic layer being comprised of carbon steel. The combination of Hashiba et al. and Ito et al., therefore, does not teach or suggest all of the claim limitations of claim 3. Removal of the rejection of claim 3 under 35 U.S.C. 103 (a) is respectfully requested.

In view of the amendments and arguments presented herein, the application is considered to be in condition for allowance. Reconsideration and passage to issue is respectfully requested.

Respectfully submitted,

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